INTRODUCTION

Someone once said that, "Other than war, there is no human activity that takes as much planning, coordination, and skill than the successful completion of a major construction project. It is not surprising that they don't get completed on time and in budget, what is absolutely amazing is that they get completed at all."

Not everyone would agree with this statement. In fact, there are really very few projects that are never completed. The rule, not the exception, is that a building is completed that generally fits the needs of the client; the client then occupies the space and uses it for many years. Granted, it may not be exactly what they wanted, at the time and cost that they wanted, and it may have some maintenance problems, but the completed project does serve the basic needs of the client.

The premise of this manual is that we should be able to do better than that.

The purpose of this manual is to provide recommendations and guidelines, developed by people with years of experience in the design and construction of facilities, to assist state agencies, architects, engineers, general contractors, and specialty contractors in the successful completion of capital construction projects for the State of Georgia. It is not intended to be rigid, inflexible or unchangeable nor is it to be viewed as a requirement for state agencies to blindly follow. It ***is*** intended to help us improve the process and reduce the number of mediocre, barely acceptable projects.

History

In the early 1950's, Georgia was faced with a critical shortage of classroom space for secondary and higher education. Tax revenues were good, but there was seldom enough to finance the construction of the magnitude needed. Compounding this problem, the Constitution of the State of Georgia prohibited the State from incurring debt, so the necessary construction financing could not be obtained. In order to resolve this problem, the State decided to establish public corporations that could sell bonds to finance the cost of constructing various facilities. The facilities would then be leased to state agencies such as the Department of Education and the Board of Regents. The rent received from the state agencies would provide an income stream sufficient to retire the bonds. In most cases, the property itself was also pledged as collateral for the debt. One of the first of these public corporations (called authorities) was the State School Building Authority. A young lawyer with the Department of Education, John E. Sims, was appointed as the Director of the new authority.

Some of the other Authorities created during this time period were the State University Building Authority and the State Office Building Authority. Others, such as the Georgia Building Authority (Markets), the Georgia Building Authority (Hospitals), the Georgia Building Authority (Penal), the Jekyll Island Authority, and the Stone Mountain Memorial Association, were created soon after or in the early 1960's. Although the Authority concept is still being used in certain circumstances, a constitutional amendment was passed in the early 1970's that created the Georgia State Financing & Investment Commission (GSFIC) to permit the state to incur debt and pledge its tax revenue for the retirement of the debt. These debt instruments are called general obligation (G. O.) bonds.

Most of the policies and procedures for capital construction used prior to the production of this manual were the policies and procedures developed by Mr. Sims. The State School Building Authority and the University Building Authority became the Georgia Education Authority (Schools)[GEA(S)] and the Georgia Education Authority (University)[GEA(U)]. Sims served as Director of both Authorities. When GSFIC was created, the policies and procedures of the GEA(S) and the GEA(U) were adopted by GSFIC and Sims was appointed Executive Director of GSFIC. Most of these policies and procedures have stood the test of time and have proved to be invaluable in protecting the state's interests and in producing capital construction projects.

This is not to say that there have not been problems. In June of 1996, the Budgetary Responsibility Oversight Committee (BROC) performed a study of the capital outlay process in Georgia and reported the following findings:

- Facilities are generally not completed within original budgets; total actual construction costs for 60 projects were 11 percent greater than original construction budgets.

- Almost half of the completed facilities reviewed were not completed within the time given for construction.

- Completed facilities generally do meet the need of the program or agency for which the facility was built although owners did report some problems with construction.

- No single entity is accountable for the expenditure of capital outlay dollars; the capital budgeting process does not always ensure that funds are available to have a facility constructed when it is needed; and the project accounts are not always "closed out" in a timely manner.

The study went on to make the following recommendations:

- The state should develop a performance-based budgeting process for the construction of new facilities; consideration should also be given to establishing a Joint Construction Oversight Committee of the General Assembly.

- Guidelines for the use of alternative management methods should be developed.

- Funding for all facility design and construction should be centralized, and a centralized contingency fund should be established and used when necessary to award a construction contract.

- The appropriations bill should be amended to include expiration dates for the use of capital outlay funds and responsibility to "close out" project balances in an timely manner should be assigned to GSFIC personnel.

- Costs for construction management should be identified and tracked at a project level for all projects, and provisions for information technology should be included in the design team work.

Following the initial report of the BROC Committee, additional legislative hearings were held and several things occurred. The various state agencies involved in the construction process banded together and formed the Georgia Association of State Facilities Administrators (GASFA) to provide a forum for discussion of problems associated with the design, construction and maintenance of facilities. It was discovered that a major portion (but not all) of the cost overruns reported were associated with the fact that the period of the study covered the time in which major construction was underway to accommodate the 1996 Olympic Games held in Atlanta. Another cause for the overruns in both time and money was the lack of effective predesign prior to the project being approved for design and construction.

In addition, in July of 1998, the Appropriation Committee of the House of Representatives established a subcommittee on Capital Outlay and Construction, chaired by Representative Johnny Floyd (the Floyd Committee). The Floyd Committee held eleven hearings and received testimony, suggestions, and recommendations from state agency personnel, representatives of the private sector, and from organizations such as the Associated General Contractors, the American Institute of Architects, the Consulting Engineers Council and GASFA. Based on these hearings, testimony, suggestions and recommendations, the Floyd Committee made the following recommendations:

1. The General Assembly and the Governor should establish a central oversight and executive authority to be responsible for ensuring a rational approach to capital outlay and construction Issues. A sensible way to accomplish this end would be to expand the duties of the Georgia State Financing and Investment Commission (GSFIC), on whose board sits the Governor, the Lieutenant Governor, the Speaker of the House of Representatives, the State Auditor, the Attorney General, the State Treasurer and the Commissioner of Agriculture.

2. The Governor's Office of Planning and Budget should develop guidelines for planning, programming, and predesign budgets in consultation with GSFIC, the Georgia Association of

State Facilities Administrators (GASFA), and state agencies. OPB should issue these guidelines for mandatory use by all state agencies and authorities.

3. To advise both GSFIC and OPB in their duties just described in Recommendation 1 and 2, the state should create a Capital Advisory Council, drawn substantially from private industry.

4. To assert the proper prerogative of the legislative branch, this study committee respectfully recommends that the Chairman of Appropriations consider establishing a formal Appropriations Subcommittee on Capital Outlay.

5. We recommend that the General Assembly develop a "Capital Predesign Fund," established initially in the amount of five million dollars, to finance the cost of planning, programming, and predesign.

6. The Georgia State Financing and Investment Commission (GSFIC) and the Department of Administrative Services (DOAS) should jointly develop a Statewide Construction Manual. This manual should provide guidelines concerning the scope, cost, and delivery of state construction projects. The General Assembly should appropriate $100,000 of GSFIC to begin this two-year project. Private industry representatives have already pledged assistance and should be regarded as indispensable partners with the state in this effort.

7. The state should authorize GSFIC to collect, consolidate, and disseminate construction project information on a quarterly basis and provide reports showing the status of state construction projects costing $250,000 and above.

8. DOAS should have an appropriation of $100,000 to develop a construction contract evaluation program plan. This program plan will provide for evaluation of the performance of construction contractors, architects, and engineers. The General Assembly will then expect DOAS to provide a full report to the legislature during the following session concerning the cost of implementing the proposed plan.

9. The General Assembly should appropriate $50,000 to the Georgia Building Authority to begin implementation of a "helpdesk" resource, providing contract administration assistance and for addressing common facility issues. This service would be provided to agencies on an as-requested basis.

10. The study committee expresses general support for House Bill 217 of 1999 requiring an inventory of all state buildings.

Although many of the recommendations of either the BROC Committee or the Floyd Committee have not been fully adopted, many are addressed by this document.

The State's Capital Outlay Process

Before successfully embarking on a capital construction project for any of the agencies of the State of Georgia, it is essential to gain an understanding of the process, the players, and the vocabulary used. It is also essential to understand and take into consideration the state's budget and funding cycle and the impact it will have on the overall project schedule. The various chapters of this manual will further explain the process. The players, the vocabulary and the budget cycle will be dealt with here.

The Players. It is important in any endeavor to know the roles and responsibilities of the various parties involved. In the capital construction process for the state, this knowledge is not just important; it is essential to the successful completion of the project. On most state capital outlay projects, there is no single entity or person responsible for the entire project from concept to occupancy. Instead, various parties assume this role depending upon the agency involved, the funding source, and the phase of the project.

When the Construction Division of the Georgia State Finance & Investment Commission administers the construction contract, certain terms have contractual meaning. For the sake of simplicity, in the following discussion we will assume that GSFIC will administer the construction contract and use the terms familiar to that process. In many cases, a single entity will perform more than one role, but the roles exist nonetheless. The parties involved are:

a. *Facility Manager* or *Tenant Agency* – the party who will actually manage and operate the finished project. This may include several entities, including the maintenance team assigned to operate the building, the actual tenants of the building and/or the division of the agency to which the building is assigned, *e.g*., the College of Computing at the Georgia Institute of Technology.

b. *Client Agency* – the State agency which requests the appropriation funding the project and who is responsible for its proper completion, *e.g*., the Board of Regents.

c. *Owner* – the party administering the construction contract, *e.g*., GSFIC on bond funded projects.

d. Design Professional – the party responsible for translating the Facility Manager's program into drawings and specifications for construction. This also includes the various consultants and engineers necessary to properly design the project and administer its construction.

e. *Regulatory Agencies* – the various state review and regulatory agencies responsible for the review and approval of the project and the drawings, *e. g*., GSFIC's Design Review Section, the State Fire Marshal, the Department of Natural Resources, *etc.*

f. *Contractor* – the party responsible for completing the physical construction of the project in accordance with the plans and specifications. This also includes the various specialty contractors and suppliers who will provide materials and services to the Contractor.

The degree of interaction among the various parties will vary dramatically depending upon the phase of the project and the party involved. The important thing to realize is that, with the number and complexity of the parties involved, it is essential that each of the parties recognize whom the decision maker is. Since this will change throughout the process and will depend largely on the decision to be made, diligence by all parties is warranted.

<u>The Vocabulary.</u> The key component is any communication is the agreement and understanding of the various terms and words used. Unfortunately, each skill and profession has developed many "terms of art" that have special meaning only to those who are knowledgeable in that skill or profession. Many words differ in meaning depending on geographical location; many are defined by contract language. We will not attempt here to list the various words and terms unique in the capital outlay construction process, but included in this manual is a glossary of terms that deals with the majority of them.

<u>The Budget/Funding Cycle.</u> Although there are many other differences between capital outlay construction in the private sector and in the public sector, issues relating to funding are probably the most pronounced. No state agency can commit funds for any purpose unless 1) there has been an appropriation authorizing the expenditure and 2) funds are available. This is not as simple as it sounds.

Construction projects are funded one of two ways, with "cash" or with bond funds. The cash can either be state tax revenues or "other funds" collected by the agency for fees, *etc*. Each agency requests appropriated funds from the State Treasury through the Office of Planning and Budget on either a monthly or quarterly allotment basis. No expenditure of funds can be made (even if an authorization was made through the appropriation process) until and unless the Office of Planning and Budget approves and allocates the funds to the agency.

All of this assumes, of course, that the project has been approved through the budget and appropriation process. State agencies are required each year to identify their capital outlay projects for the next five years. The Office of Planning and Budget requires these projects to be submitted by September 1 of each year. OPB staff reviews these requests and assists the Governor develop specific recommendations. The Governor presents a budget request to the Legislature during the first week of January each year.

There are two budget requests. The Governor requests funds each year to "supplement" the current fiscal year budget. This budget is commonly know as the "little" or Supplemental Budget. There is also a request for the full budget for the next fiscal year. The fiscal year for the state of Georgia begins July 1 and extends to June 30. Any cash appropriations not committed or expended prior to June 30 are "lapsed" back to the State Treasury for re-appropriation by the Legislature in January.

Generally speaking, both the full budget and the Supplemental Budget are passed by the Legislature and signed by the Governor in late March or early April of each year. Any cash funds appropriated in the Supplemental Budget are immediately available. Cash funds appropriated in the "big" budget are not available until July 1.

If the project is funded through the sale of General Obligation Bonds, no funds can be committed until the bonds have been sold. The Financing Division of GSFIC handles the sale of General Obligation Bonds. Market conditions largely determine the size and timing of a bond sale. Each sale also requires the approval of the Commission, which consists of the Governor, the Lieutenant Governor, the Speaker of the House of Representatives, the State Auditor, the Attorney General, the State Treasurer and the Commissioner of Agriculture. Bond sales are scheduled based on need and existing market conditions, so the timing of the availability of funds can vary dramatically from year to year and from month to month.

Understanding the constraints placed on state entities by this fairly rigid process is essential to the successful planning and completion of any construction project.

Other Issues

This manual has been prepared in a loose-leaf format with the assumption that revisions and enhancements will occur. It is intended that eventually the document will be available online at our web page located at http://www.ganet.org/gsfic/. Any questions or comments concerning this document should be addressed to the Interim Director of the Construction Division (Mr. Lee H. Richey) at (404) 656-3401.